# PSIA/AASI Intermountain Children's Specialist PowerPoint Reference Guide



- This Reference Guide provides summaries for a few Children's Specialist Concepts
- Please refer to "Core Concepts for Snowsports Instructors" (2001) and "Children's Instruction Manual - 2<sup>nd</sup> edition" (2008) for more information



### **Models & Concepts**



#### **Bloom's Taxonomy**



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#### **Maslow's Hierarchy of Needs**



"Once the needs at one level are satisfied we move on to the next level of needs in our journey toward a state of self actualization" – Maslow



#### **Movement Concepts**

Concept	Movement	What?	
Motor Control	One-sided	Moves one body part at a time	
	Bilateral	Move 2 sides of the body at the same time	
	Cross-sided	Move upper body in opposition to lower body	
	Fore/Aft Movements develop before Lateral/Oblique Movements		
Movement	Locomotor	Traveling movements: Walking & sliding	
Skills	Non-Locomotor	Movements that originate from a base of support: Bending & twisting: "Reach for the sky, then touch the ground"	
	Manipulative	Holding poles; picking up an object	



## **Teaching With Creativity**



### Gardner's Multiple Intelligences

Intelligence	Process information	Teaching Strategy
Verbal-Linguistic (Word smart)	Loves words & language, reading & talking, telling & hearing stories	Have kids tell stories about their skiing experiences
Logical-Mathematical (Number/logic smart)	Asks "why" & "how," recognizes patterns easily, follows logical steps, works to solve problems	Use numbers to relate to movements (i.e., numbers 1-5 correspond to different size wedges)
Spatial (Picture smart)	Has an active imagination, thinks through pictures & images, enjoys designing, drawing & visualizing	Draw turn shapes or track shapes in the snow; Have kids map where they skied
Bodily-Kinesthetic (Body smart)	Thinks through sensations, desires to move	Relate skiing movements to those common to other physical activities; Have kids ski around slalom poles, cones or other visual aids
Musical-Rhythmical (Music smart)	Thinks through sounds, rhythm & musical melodies	Use rhythm or music as a cadence for movement; Have kids identify the sounds that their skis make on the snow
Interpersonal (People smart)	Adept in social situations, aware of others feelings & able to respond appropriately, use input of others to base responses	Emphasize group interaction; Assign each kid a special duty to perform within the group
Intrapersonal (Self smart)	Thinks a lot, likes to work alone, processes info within themselves, easily sets personal goals	Create problem solving situations (i.e., let kid select their own path or turn shapes down a run)
Nature Smart	"Naturalist intelligence enables human beings to recognize, categorize & draw upon certain features of the environment when processing information"	Learning is experienced through the natural world



## Real vs. Ideal Movements



#### **Real vs. Ideal Movements - Summary**

	Ideal - Skiing		Real - Skiing
•	Ankles, knees & hips flex and extend to maintain balance and pressure control over the skis	•	Kids flex more in the hips & knees and tend to work the back of the boot and tail of the ski more
•	Directional movements of the feet, legs & hips release and engage the edges at the turn	•	Kids tend to move their whole body and legs in a more gross way
	transition	•	Edging movements tend to be more harsh & bracey
•	Balance is directed to the outside ski in the turn The legs & feet turn under the upper body to	•	Balance may or may not be well directed to the outside ski in the turn
•	guide the skis Movements of the upper body, arms, hands &	•	Kids generally lack upper/lower body separation & tend to turn their whole bodies
	pole usage are disciplined and directed to flow with the skis through turns	•	Kids under 7 usually don't use poles and generally lack upper body discipline
	Ideal – Riding		Real - Riding
•	Ankles, knees & hips flex and extend to maintain balance and pressure over the board	•	Kids tend to flex more in the hip than lower in the body, levering off the binding backs
•	The legs and feet work independently or oppositionally to torsionally flex or twist the board	•	It is difficult for kids to work the legs in opposition; they tend to use the legs more as a unit
•	Movements of the upper body, arms & hands are disciplined and compliment the action of the legs	•	Kids have an easier time controlling the trunk & try to use the upper body before the legs
•	Movements to toe & heel sides are used equally and toe/heel symmetry results	•	Turn initiation is often slow & the board tends to slide sideways at end of turn



### Real vs. Ideal - Skiing

Ideal	Real	Why?			
	Balancing/Stabilizing Movements				
<ul> <li>Joints flex &amp; extend evenly (ankles, knees, hips &amp; spine)</li> <li>Hips centered over feet (side view)</li> <li>Ears ahead of center of feet; hands ahead of ears</li> <li>Outside ski bends more than inside ski - primary weight is on the middle of the outside ski</li> </ul>	<ul> <li>Knees &amp; hips flex greater in younger children</li> <li>Ankle movements not as coordinated</li> <li>Hips slightly behind feet, ears over heels, or ears over knees</li> <li>Hands in a variety of places depending on child's size &amp; speed at which they're traveling</li> <li>Inside ski weighted as much as outside ski, bends toward tail</li> </ul>	Large muscle groups develop first			
	Directional Movements				
<ul> <li>Body moves into direction of new turn for edge change</li> <li>Ski travels along arc – tip &amp; tail through same path</li> <li>Pole swings in direction of travel</li> </ul>	<ul> <li>Movement is up &amp; back to change edges</li> <li>Tail of ski slides past arc of tip - pivot and skid</li> <li>Poor coordination of pole swing &amp; directional guidance</li> </ul>	See other sections			



### Real vs. Ideal - Skiing

	Ideal	Real	Why?		
	Rotational Movements				
•	Legs turn underneath the upper body to guide skis through the arc of turn Femur (thigh bone) rotates in hip socket Upper body remains stable & strong	<ul> <li>Shoulders and torso generate turn - large muscle groups are stronger</li> <li>Articulation of joints is not well developed</li> <li>Entire body moves as a unit</li> </ul>	<ul> <li>Strength &amp; coordination of upper body develops first</li> <li>Ability to move body parts in opposition not yet developed in young children</li> </ul>		
		Pressure Control Movements			
•	Body and skis flow smoothly over changing conditions and terrain Joint flexion & extension is determined by changes in terrain & pitch of slope Skis bends progressively through the turn; entire ski used in turn	<ul> <li>Bouncing &amp; loss of contact</li> <li>Joint flexion uncoordinated; knees &amp; hips usually over-flexed</li> <li>Bend in ski comes late in turn - frequently at the tail</li> </ul>	<ul> <li>Strength &amp; coordination of large muscle groups develop first</li> </ul>		
	Edging Movements				
•	Diagonal movements of feet, legs & hips engage & release edges Shins contact both boot cuffs on a forward diagonal Edges engaged & released in one smooth movement	<ul> <li>Tipping of legs &amp; body into hill, &amp; away from ski creates edge</li> <li>Shins have little or no contact with front of boot cuff</li> <li>Movements are harsh &amp; jerky</li> </ul>	<ul> <li>Strength &amp; coordination of the larger muscles of the upper leg &amp; torso develops first; lower leg &amp; ankle later</li> <li>Ability to coordinate oppositional movements of the left &amp; right side of the body not yet developed</li> </ul>		



#### Real vs. Ideal - Riding

	Ideal	Real	Why?
		Reference Alignments	
•	Shoulders, hips & knees aligned perpendicular to front foot Head & eyes turned toward direction of travel	<ul> <li>Feet, knees, hips, shoulders, hips, feet, head, &amp; eyes all facing the same direction, or head &amp; upper torso turned toward nose of board</li> </ul>	<ul> <li>Ability to move the body sideways develops later than ability to move forward and backward</li> </ul>
•	Shoulders & hips aligned with terrain on which board is moving or about to land	<ul> <li>Shoulders &amp; hips rarely tip to align with terrain, but stay fixed in one plane</li> </ul>	<ul> <li>Easier for kids to do same moves with right &amp; left sides of body</li> <li>Movements required to tip hips &amp; shoulders more difficult</li> </ul>
•	Head & hips align between the feet & over the board or turning edge	<ul> <li>Heel-side moves: Hips are outboard of heel-side edge &amp; head is over or beyond toe-side edge</li> <li>Toe-side moves: Hips are over center or heel-side edge of board &amp; head is outboard of toe-side edge</li> </ul>	<ul> <li>Muscle strength &amp; coordination to flex ankles develops later than strength to flex hips and knees</li> <li>Children use hips and knees to align center of mass</li> </ul>
		Rotational Movements	
•	Rotation of legs, hips, & lower spine dominates	<ul> <li>Rotation of shoulders &amp; upper spine dominates</li> <li>Lower body rotation tends to be a result of counter-rotation or rotation of upper body</li> </ul>	<ul> <li>Muscle control develops first in head &amp; torso, then moves along extremities</li> </ul>
•	Rotational movements are well controlled & efficient	<ul> <li>Rotational movements tend to be more than needed (primary movements used to change board direction)</li> </ul>	<ul> <li>Movements tend to be exaggerated &amp; uncontrolled initially. Later, become refined &amp; efficient</li> </ul>

#### Real vs. Ideal - Riding

	Ideal	Real	Why?		
	Flexion & Extension Movements				
•	Feet, ankles, knees, hips, & spine all involved in flexion & extension movements that move CM up & down, side to side, or fore & aft relative to board deck	<ul> <li>Flexion &amp; extension of knees and hips dominates</li> </ul>	<ul> <li>Muscle strength &amp; coordination to flex ankles &amp; toes develops after strength to flex hips &amp; knees</li> <li>Children use hips &amp; knees to align center of mass</li> </ul>		
•	Movement generally initiated from feet & ankles	<ul> <li>Movement in feet &amp; ankles occurs as a result of upper body movement if at all</li> </ul>	See above		
•	Toe-side moves: Toes, ankles, & knees flex to move CM over or beyond toe- side edge to increase edge angle	<ul> <li>Toe-side moves: Hip flex dominates with some knee flex moving torso toward toe-side edge &amp; hips toward heel-side edge</li> <li>(or) Hips &amp; knees remain extended &amp; entire body tips to inside of turn from ankle</li> <li>Consequence: Little or no edge angle</li> </ul>	See above		
•	Heel-side moves: Flexion of ankles, knees, & hips causes back of lower leg to lever against high-back or back of boot & aligns hips over heel-side edge & increases edge angle	<ul> <li>Heel-side moves: Knee flex dominates, with some hip flex</li> <li>(or) Hip flex dominates with no knee flex</li> <li>Consequence: Back of lower leg applies little leverage to high-back &amp; hips end up outboard of heel-side edge with little edge angle</li> </ul>	See above.		
•	Fore & aft movements of center of mass used to anticipate, initiate, & direct movement of board through turn are controlled through oppositional flexion & extension movement of joints on left & right sides of body	<ul> <li>Joints of right &amp; left sides of body tend to flex or extend the same amount at the same time, so CM is centered, or board accelerates toward fall line, behind middle of board</li> <li>Turn initiation often slow, &amp; board tends to slide sideways at end of turn</li> </ul>	<ul> <li>Easier for kids to do exactly the same moves with right &amp; the left sides of body</li> <li>Oppositional movements used to extend left knee while flexing right knee develop later</li> </ul>		







	Objectives	How?
<u>P</u> lay	<ul> <li>Introduce the Lesson Segment</li> <li>Assess Student</li> </ul>	<ul> <li>Discover kids' desires</li> <li>Create positive group dynamics &amp; trust</li> <li>Assess movements (real vs. ideal) &amp; review skills</li> </ul>
<u>D</u> rill	<ul> <li>Determine Goals &amp; Objectives</li> <li>Present &amp; Share Info</li> </ul>	<ul><li>What are the kids' goals?</li><li>Present &amp; share info</li><li>Implement action plan</li></ul>
<u>A</u> dventure	<ul><li>Practice</li><li>Check for Understanding</li></ul>	<ul> <li>Practice ("Drills, skills, &amp; hills")</li> <li>Frequently check for understanding</li> <li>Add challenges, when appropriate</li> </ul>
<u>S</u> ummary	Summarize Learning     Segment	<ul> <li>Review goals</li> <li>Summarize experiences &amp; objectives</li> </ul>



#### **PDAS: 3-4 Years**

Characteristics	<ul> <li>Language use beginning</li> <li>Egocentric ("Me")</li> <li>Can only process one thing at a time; can't reverse directions</li> <li>Large head in proportion to body</li> <li>Whole body moves as a unit</li> <li>Separation anxiety</li> </ul>
Play	<ul> <li>Choose things that they know ("Their World")</li> <li>Flexibility &amp; adaptability are essential</li> <li>Play should revolve around how things look, feel &amp; sound</li> <li>TLC</li> </ul>
Drill	<ul> <li>Physical Development - Balance is always a good focus</li> <li>Drills should be simple &amp; playful - Use words &amp; ideas that they know (ask them)</li> <li>Individualized drills - Show them the move &amp; have them show it back</li> <li>TLC</li> </ul>
Adventure	<ul> <li>Establish physical boundaries (so a student isn't overwhelmed by too much open space)</li> <li>Adventure – Show them that "the mountain is their friend"</li> <li>Difficult to separate drills from play &amp; adventure</li> <li>Keep it fun!</li> </ul>
Summary	<ul> <li>Goal of the day - Keep their attention &amp; keep them having fun</li> <li>Summarize by having them show moves with their hands &amp; feet</li> <li>Summarize with parents - Show them what you did, explain visual &amp; verbal cues</li> </ul>



#### **PDAS: 5-7 Years**

Characteristics	<ul> <li>Egocentric; Have not fully developed the concept of sharing</li> <li>Relate to the world through fantasy</li> <li>Care more about having fun than competition</li> <li>Shifting from singular to group play</li> <li>May have trouble distinguishing amid distractions</li> <li>Fine motor skills not developed</li> </ul>
Play	<ul> <li>Use fantasy, but focus on movement - Walk like a tin soldier, Ski like a butterfly</li> <li>Choose a theme - Wizard of Oz, Ice Age, Finding Nemo, Harry Potter, Shrek</li> <li>Make use of your terrain</li> </ul>
Drill	<ul> <li>Physical Development - Balance is always a good focus</li> <li>Drills should be simple &amp; playful - Jump like a grasshopper, Ski tall like an elephant, Ski small like a mouse</li> <li>They like to be what you want them to be</li> <li>Drills &amp; adventure coincide – Mesh them to teach kids kinesthetic awareness</li> </ul>
Adventure	<ul> <li>Builds bridge back to skiing</li> <li>Difficult to separate drills from play &amp; adventure</li> <li>Refine movements started in first task - Hop like a kangaroo, Good bugs chasing bad bugs</li> <li>Use VAK - Popcorn, Buzzing like bees, Squishing bugs in your boots</li> <li>Set up a defined area &amp; keep groups working together to build a good team (good &amp; bad bugs)</li> </ul>
Summary	<ul> <li>Goal of the day - Keep their attention &amp; keep them having fun</li> <li>Summarize by reminding them of their experiences; re-enact them</li> <li>Summarize with parents – Show them what you did, explain visual &amp; verbal cues</li> </ul>

#### PDAS: 8-11 Years

Characteristics	<ul> <li>Fine motor skills developing</li> <li>Developing social skills &amp; sense of competitiveness</li> <li>Still looking for praise from their coach</li> <li>They still respect your authority, but maybe not your intelligence</li> <li>Goal setting is important! Ask them what they want to do!</li> </ul>
Play	<ul> <li>Use team building activities to establish a group environment - The "Name" Game</li> <li>Assess skiing skills thru fun activities - Ski thru an easy terrain park, Hockey/soccer tag</li> <li>Make use of your terrain</li> </ul>
Drill	<ul> <li>Keep drills loose - Freedom to learn thru self-discovery: ski backwards &amp; turn</li> <li>Keep them busy &amp; challenged, so they aren't always trying to outsmart you</li> <li>Allow group members to challenge each other (&amp; themselves). Strive for personal improvement</li> <li>Use cue words to reinforce focus</li> <li>Use drills that reinforce the same movements/skills that are easily modified to meet the needs of various ability levels within the same group - Whirly birds (linked hockey stops to linked short radius turns)</li> </ul>
Adventure	<ul> <li>Create play &amp; challenge; bring drills back into skiing</li> <li>Return to terrain park. Feedback moves from instructor-centered to terrain-inspired</li> <li>Use terrain to reinforce new movements – Keep it fun!</li> </ul>
Summary	<ul> <li>Remind them of a reference point – Physical cues, Verbal cues, Sensory cues</li> <li>Reinforce skills &amp; safety for terrain features &amp; parks</li> <li>Review goals - What you did to reach them &amp; how you did it. How can they keep doing it? Why was it fun?</li> </ul>



#### PDAS: 12-14 Years

Characteristics	<ul> <li>Young adults don't want to be treated like kids – "Talk to them like adults"</li> <li>Peer acceptance important</li> <li>Rapid growth/body changes; Center of Mass/Balance changing rapidly</li> <li>Strength &amp; coordination may not match bone growth</li> <li>Involve them in decision making &amp; goal setting – Listen to what they want to do</li> </ul>
Play	<ul> <li>Students may be nervous (social anxiety) – Find ways to break the ice</li> <li>Assess skiing/riding with tasks that bring the focus out - "Think of a song; now try to make turns in rhythm with the song's beat"</li> <li>Be flexible &amp; give them freedom to experiment</li> <li>Make use of your terrain</li> </ul>
Drill	<ul> <li>Select a focus &amp; explain why – "Make better short turns to control your speed on cat tracks"</li> <li>Direct feedback toward reaching group goals &amp; encourage group interaction – Ski in pairs</li> <li>Keep directions specific, but use looser group handling – Explore &amp; experiment</li> <li>Remind them of focus &amp; provide lots of time for individualized coaching &amp; practice</li> <li>Feedback - Be specific &amp; honest ("Don't blow smoke")</li> </ul>
Adventure	<ul> <li>Play, drill &amp; adventure blend together</li> <li>Continue to reinforce focus as you explore new terrain &amp; conditions</li> <li>Provide new challenges in a safe environment</li> <li>Keep evaluation relative to goals – "Can you keep your rhythm in a series of turns on new terrain?"</li> </ul>
Summary	<ul> <li>Goal of the day – Review initial goals &amp; steps needed to reach them</li> <li>Ask them to summarize – What did they get out of it? What did they like? What next?</li> <li>Give them your perspective on what they accomplished (honest, accurate, specific praise)</li> </ul>



## Behavior Management: Problem Solving



#### **Problem Solving**

## ... is a technique that teaches kids how solve their own problems and gives them the skills to:

- ✓ Be independent
- ✓ Express their individuality
- ✓ Be self-reliant
- ✓ Have a sense of responsibility

#### • What a teacher/instructor should <u>not</u> do:

- ✓ Is not the authority figure solving the conflict
- ✓ Does not place blame
- ✓ Does not try to figure out who had the "toy" first
- ✓ Does not order kids to take turns
- Does not separate, scold or lecture about sharing



### **Problem Solving - Negotiation**

#### • Negotiation is a process of problem solving

#### • 6-Step Model:

- ✓ Help the child identify the problem
- ✓ Encourage the child to contribute ideas to solve the problem
- ✓ Restate the child's ideas positively
- ✓ Help the child decide which idea(s) they prefer
- ✓ Help the child carry out their solutions
- Reinforce the process by telling the child how well they solved their problems

#### • Helpful Tips:

- ✓ Establish eye contact
- ✓ Position your body at the child's level
- ✓ Use a neutral tone of voice and don't become emotionally involved



### **Presentations**



#### **Characteristics of a Good Presentation**

Have A Game Plan
<ul> <li>Know the information (Be able to speak without notes &amp; only use an outline)</li> <li>Practice, Practice, Practice!</li> <li>Have a game plan for success</li> </ul>
When Presenting
<ul> <li>Make sure everyone can hear you</li> <li>Have a defined structure: Intro - Body - Summary</li> <li>Clearly state your objectives &amp; provide a value proposition</li> <li>Draw the audience in - Use the participant's names</li> <li>K.I.S.S. (Keep it simple)</li> </ul>
Things to consider
<ul> <li>Keep it consistent         <ul> <li>Eye contact!</li> <li>Pace the content &amp; keep things moving –</li> </ul> </li> <li>Not too fast; not too slow, pattern interrupt &amp; change your voice inflection             <ul> <li>Be positive!</li> <li>Use real experiences to bring the information to life</li> <li>Provide feedback – specific to the individual(s)</li> </ul> </li> </ul>
Success Factors
<ul> <li>Be flexible! Be able to: (1) Change your approach if things are not working,</li> <li>(2) Adapt to external factors &amp; (3) Adapt to the needs &amp; wants of your audience</li> <li><u>Be Yourself!</u></li> </ul>